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EXAMINER	
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2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/996,160	SEPPA ET AL.	
	Examiner	Art Unit	
	Hanh Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of tima may be available under the provisions of 37 CFR 1.136(a). In no event, however, mey e reply be timely filed after SIX (6) MONTHS from the mailing data of this communicetion.
- If NO period for reply is spacified ebove, the meximum statutory period will apply end will expire SIX (6) MONTHS from the meiling dete of this communicetion.
- Failura to raply within tha sat or extandad parad for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office leter then three months after the meiling dete of this communicetion, even if timely filed, mey reduce eny aernad patent term edjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 1/5/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-15,17-21,24-27 and 29-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-15,17-21,24-27 and 29-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 11, 24, 31 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Regarding claims 11, 24, 31, "the further timer implemented by a logical link control function" has been shown in parent claims 1, 29 andd 30 respectively.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 3, 4, 5, 6, 12, 14, 15, 17, 18, 19, 20, 21, 25, 27, 29, 30, 32, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 29; is "the timer function" on line 4 referred to "a ready timer function" on line 3 ?. If not, then there is a lack of antecedent basis on this limitation. Is " the state of the data channel" on line 10 of claim 1 referred to " a ready state maintained in the data channel" in line 4 ?

Regarding claims 15 and 27, applicant is required to indicate what is meant by " or similar" the communication system is based on since "similar" is undefined language. The

specification on page 16 indicates that the mobile station 1 is enable to setup and accept any circuit mode speech/data or TETRA packet data call.

Regarding claim 30, it is not addressed whether "said timer function" on line 11 indicate " a ready timer function" on line 3 or "the ready timer function" on line 9. Further, it is not clearly addressed whether " a connection function module" on line 10 is referred to " a connection function module" on line 5. If it is, then there is a lack of antecedent basis for this claimed language.

Regarding claims 20, 25, 32, the claimed language "adapted to" makes the claim limitation not statutory because this claimed language only suggests "an option" and it does not limit "the station" as claimed to perform a particular step or the scope. See MPEP 2106.II.C.

Further in claim 25, It is unclear what is meant by " handling an indication of an expiry of the further timer as it would be an indication from the timer function"

Further in claim 12, It is unclear what is meant by " as it would be an indication from the timer function"

Regarding claims 2, 5, 6 is "the event" referred to "a predefined event" in claim 1 ? Is the " timer function" in claims 2-6, 8 referred to "a ready timer function" in claim 1 ?

Regarding claim 14, is "a data channel" referred to " the data channel" or " a data channel" in claim 1. If it is, there is a lack of antecedent basis for this claimed language.

Regarding claims 17-20, is "the timer function" in each of these claims referred to "a ready timer function" in claim 29?. Further, is " the event" in claims 18, 19, 20 and 21 referred to " a predefinerd event" in claim 29 ?.

Regarding claims 33, 34, is " the timer function" referred to "a ready timer function" IN claim 30 ?

Applicant is required to make appropriate correction to clarify the claimed language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 11-15, 17-21, 24-27, 29-34 are rejected under 35 USC 103(a) as being unpatentable over Gallant et al. (US pat. 5,711,008) in view of Fong et al. (US pat. 6,931,569 B2).

Regarding claims 1, 13, 14, 24, 26, 29, 30, 31, Gallant et al. discloses a method in a communication system comprising activating a data channel between a first and a second station (see fig.2; col.5, lines 50-65; mobile terminal 22 registers in the record 44 to communicate on assigned channel with base station TR 18); starting a ready timer function in layer 3 of a connection function model (see fig.4, col.6, lines 5-15 and col.7, lines 42-45; mobile terminal 22 starts its timer and communicates with base station TR 18 according to SNDCP protocol which is layer 3); maintaining the data channel in a ready state until the timer function indicates an expiry of a predefined period (see fig.4, col.7, lines 45-50; maintaining data transfer delay until timeout) ; initiating transmission of data on the data channel by a Subnetwork Dependent Convergence Protocol (SNDCP) entity of the first station (see col.6, lines 5-15; mobile terminal 22 communicates with base station TR 18 according to SNDCP protocol); preventing the data

channel to change from the ready state to another state based on the timer function, until a predefined event (see fig.3, seecol.7, lines 20-30; when station B does not receive the correct packet and the timer at station A is timed out, station A restarts its timer). Gallant et al. does not disclose changing the state of the data channel to the other state based on an indication by a further timer in a logical link control (LLC) layer of the connection function model that is lower than a layer on which said timer function is implemented.

Fong et al. discloses (fig. 7 and col. 8, line 50-col. 9, line 17) changing the state of the data channel to the other state based on an indication by a further timer in a logical link control layer of the connection function model that is lower than a layer on which the timer function is implemented (fig.7; steps 706&710; col.8, lines 36 to col.9, line 17; when a packet is loss, a layer two or link layer timer is set and therefore the ARQ process is stalled for a period of time to recover frames). It would have been obvious to one of ordinary skill in the art to adapt the link layer timer of Fong et al. to Gallant 's system to delay the generation of NAKs and restore the lost packets.

In claims 2, 7, 17, 21, 33, Gallant et al. discloses at least one timer of the timer function is stoped until an indication of of the event (see fig.3, col.7, lines 7-20; timer is stop when a Reply 52 is received).

In claims 3, 4, 6, 19 and 20, Gallant et al. discloses the at least one timer is reset, restart (see fig.3, col..7, lines 7-25; station A restarts upon a reply 52 is received).

In claim 14, Gallant et al. discloses data channel that is in ready state prevents communication over another channel between the two stations (see col.5, lines 60-67; mobile

terminal 22 selects a channels for its use and communicates on this channel with a respective base station TR 18).

In claim 9, gallant et al. does not disclose the length of predefined period is set during activation based on a timer value. However, setting a predefined period based upon a time value in the mobile terminal has been a well-known skill in the art. Therefore, it would have been obvious to one skilled in the art to preset a value during activation of the mobile to determine whether the mobile is registered to communicate in the wireless network. The motivation is to save waste capacity of mobile that is not authorized to register in the network.

In claims 12, 25 and 32, from the missing of Gallant et al. which does not disclose expiry of the further timer. Fong et al. discloses the link layer timer is expired at step 714, fig.7 (see col.9, lines 14-20).

In claim 8, Gallant et al. discloses the timer function is prevented to have impact on the state of data channel (it is clearly seen in fig.4 of Gallant et al. the TR 18 waits until the timer is timed out before it transmit a reply 68. This would prevent an error when a reply is received at the mobile terminal 22 after the MT 22 resends the packet). See col.7, lines 55-65.

In claims 15, 27, the limitations of these claims have been addressed in claim 1.

In claims 5, 18 and 34, gallant et al. disclose the timer function is ignored until an indication of the event (disclosed in claim 1).

Response to Arguments

Applicant's arguments with respect to claims 1-9, 11-15, 17-21, 24-27, 29-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Demetrescu et al. (US pat. 6,791,944 B1);

Forslow (US pat. 6,937,566 B1).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Hanh Nguyen

HANH NGUYEN
PRIMARY EXAMINER